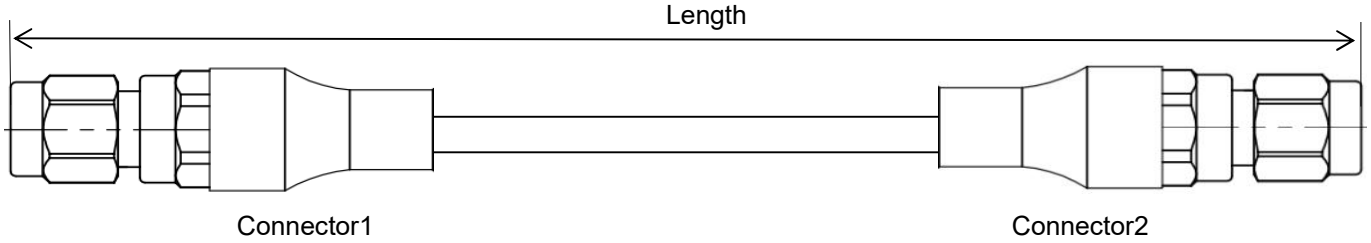
Super-flexible Phase Stable Test Cable Assembly, Using UF520

DC-26.5 GHz, SMA Male to SMA Male **UF520-SMAMSMAM-L(L:Length)**

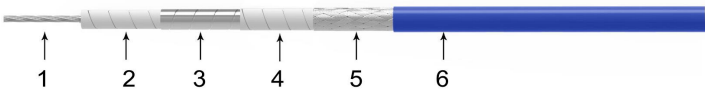


· Length can be in meter or in inch etc, e.g, UF520-SMAMSMAM-1M. Standard length tolerance: ±1.5%. Custom lengths and other connector types available.
· Length is measured from one connector end to the other connector end as shown above. For RA connectors, use the pin center-line.

Configuration

Connector 1	SMA male	**Connector 2**	SMA male
Body	Passivated stainless steel	Body	Passivated stainless steel
Center Contact	Gold plated brass	Center Contact	Gold plated brass
Cable Type	UF520		

Cable Construction



No.	Construction	Size（mm）	Materials
1	Center Conductor	1.02	Stranded silver plated copper
2	Dielectric	3.03	LD PTFE wrapping
3	Outer Conductor	3.22	Silver plated copper strip wrapping
4	Interlayer	3.47	PTFE
5	Outer Shield	4.05	Silver plated copper wire braiding
6	Inner Jacket	5.20	PUR

Electrical

Frequency	DC-26.5 GHz
Impedance	50 Ω
VSWR Max	1.25
IL Max(1 meter assembly)	3.1dB
*Mechanical Phase Stability	<±5º
Amplitude Stability vs Shaking	<±0.1dB

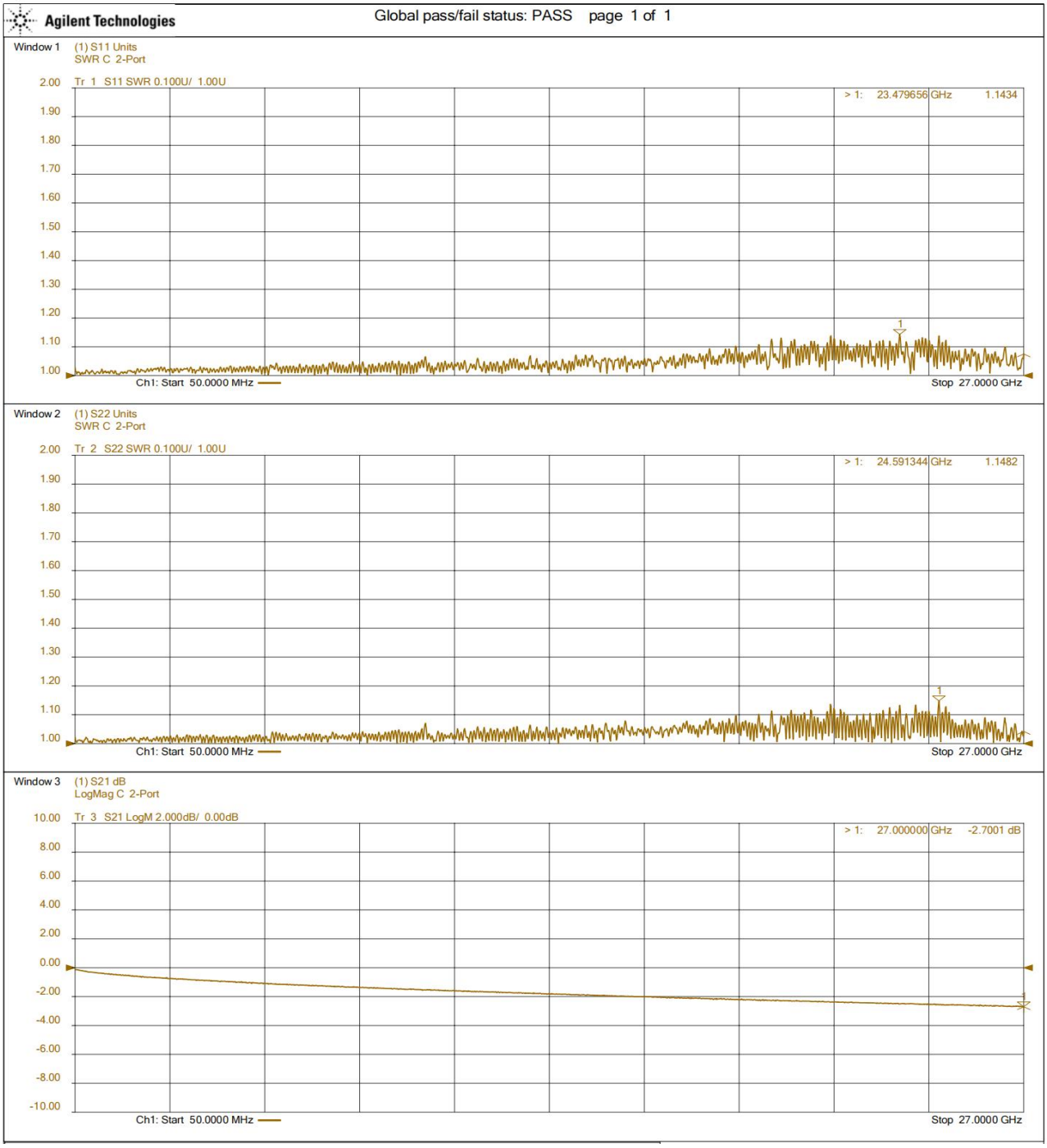
* Wrapped 360˚ around a 52mm radius mandrel.

Mechanical & Environmental

Min.Bending Radius Static	18mm
Min. Bending Radius Repeated	50mm
Velocity of Propagation	76%
Temperature(Operation)	-50～85 ºC
Temperature(Storage)	-60～85 ºC

Bulk Cable Attenuation(Typical@25℃) **& Power**(VSWR=1.0; 40℃; Sea level)

Frequency MHz	300	1000	2000	4000	6000	8000	10000	12000	14000	16000	18000	26500
dB/100 Meter	20.4	38.5	55.9	82.0	103.2	121.9	139.0	154.9	169.9	184.2	198.0	252.1
Avg.Power kW	0.830	0.441	0.304	0.207	0.164	0.139	0.122	0.110	0.100	0.092	0.086	0.067
Attenuation at any frequency＝[1.136600×SQRT(FMHz)]+[0.002530×FMHz]												

Notes:
1) The above attenuation refers to typical loss of cable only, max loss is 1.1 times of typical loss. Insertion loss per connector is estimated as 0.03dB x SQRT Freq(GHz).
2) Power handling values are calculated based on cable properties. Power handling will vary based on connector type and actual VSWR of the cable assembly.

Typical Test Data (UF520-SMAMSMAM-1M)